

In the Claims:

1. (Currently Amended) Composite sandwich construction, comprising a tension plate, a contact layer applied to the tension plate, and a compression layer applied to said contact layer, said contact layer comprising an epoxy-based material or a contact glue having a bonding strength similar to that of an epoxy-based material, and said compression layer being an inorganic layer at least comprising ultra fine particles, water and a binder;

wherein the inorganic layer encapsulates a reinforcement, said reinforcement being steel bars or rods, carbon-, glass-, plastic and/or steel fibres, and

wherein the reinforcement bars or rods constitutes 3 % to 60 % by weight of the inorganic layer.

2. (Cancelled).

3. (Cancelled).

4. (Currently Amended) Construction according to claim 1, [[2,]] wherein the fibre content constitutes 1 % to 35 % by weight of the inorganic layer.

5. (Previously Presented) Construction according to claim 1, wherein the inorganic layer comprises a coarse graded aggregate having an aggregate size between 1 mm and 22 mm, and wherein the grading is in intervals having grain sizes 2 - 5 mm, 3 -6 mm, 5 - 8 mm and/or 8 - 11 mm.

6. (Previously Presented) Construction according to claim 1, wherein the inorganic layer comprises a coarse aggregate constituting 20% to 75% by weight of the inorganic layer.

7. (Previously Presented) Construction according to claim 1, wherein the inorganic layer comprises in addition to the binder a fine aggregate fraction, having particles between

0 mm and 4 mm and wherein the fine aggregate fraction comprises one or more of the following: silica sand, river sand, calcium filler, bauxite or other aggregates of good quality.

8. (Previously Presented) Construction according to claim 1, wherein the water and binder have a water/binder ratio that is between 0.15 and 0.45.

9. (Previously Presented) Construction according to claim 1, wherein the binder is cement, a combination of cement and micro silica.

10. (Previously Presented) Construction according to claim 1 wherein air content adjusting additives and/or super-plasticizers or other water reducing agents are added to the inorganic layer during its dry powder or wet mixing state.

11. (Previously Presented) Construction according to claim 1, wherein the contact layer has a layer thickness between 0.2 mm and 5 mm and wherein said layer comprises rock particles having a size between 0.5 mm to 8 mm and wherein the rock is chosen from bauxite, quartz, granite or similar types of strong aggregates.

12. (Previously Presented) Construction according to claim 1, wherein the inorganic material layer has a thickness between 5 mm and 150 mm.

13. (Previously Presented) Construction according to claim 1 wherein the steel plate is a bridge deck, ship deck, oil platform, windmill foundation or tower or other off shore facility, staircase, balcony carpark deck or other load carrying steel structure, protective barrier, construction element, floorboard, furniture plate or ship hull.

14-19. (Cancelled).

20. (Currently Amended) Composite sandwich construction, comprising a tension plate, a contact layer applied to the tension plate, and a compression layer applied to said

contact layer, said contact layer comprising an epoxy-based material or a contact glue having a bonding strength similar to that of an epoxy-based material, and said compression layer being an inorganic layer at least comprising ultra fine particles, water and a binder;

~~according to claim 1,~~ further comprising particles which are partly embedded in the contact layer and partly extend out of the contact layer, wherein the compression layer has been applied over the part of the particles which extend out of the contact layer so as to enclose them within the compression layer.